

ABSTRACT

APPARATUS AND METHOD FOR OPTIMIZING
TELECOMMUNICATION NETWORK DESIGN USING WEIGHTED SPAN
CLASSIFICATION

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Based upon given demands, nodes, spans, speed hierarchy, equipment, weights, preferences, and constraints, the apparatus and method disclosed creates an optimized network configuration by (1) separating demands into groups based on their shortest path and the maximum cycle size, (2) routing each demand group, and (3) re-routing the demands on rings that exceed the Cost Threshold when cost effective.. Common elements in routing demands in the groups are functional analysis for equipment selection and functional analysis for demand routing.

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